

WE CLAIM AS OUR INVENTION:

- 1 1. A microlancet device formed of silicon and having a
2 sharp point for piercing the skin of a subject.
- 1 2. The microlancet device of Claim 1 wherein the
2 microlancet device has a cross section between
3 approximately 50 micrometers and approximately 250
4 micrometers.
- 1 3. The microlancet device of Claim 1 wherein the
2 microlancet device has a length between approximately
3 1 millimeter and approximately 3 millimeters.
- 1 4. The microlancet device of Claim 1 and further
2 comprising a nitride film deposited on the silicon
3 substrate.
- 1 5. The microlancet device of Claim 5 wherein the nitride
2 film has a thickness of approximately 2000 Angstroms.
- 1 6. The microlancet device of Claim 5 and further
2 comprising coating of photoresist on the nitride film.
- 1 7. The microlancet device of Claim 5 and further
2 comprising removing a portion of the nitride film.
- 1 8. The microlancet device of Claim 8 wherein the portion
2 of the nitride film is removed by potassium hydroxide.

- 1 9. The microlancet device of Claim 9 and further
2 comprising a photoresist coating applied to the
3 silicon wafer.
- 1 10. The microlancet device of Claim 10 and further
2 comprising patterning the silicon wafer with a plasma
3 etching process.
- 1 11. The microlancet device of Claim 11 and further
2 comprising removing the photoresist coating.

- 1 12. A method-of constructing a microlancet device formed
2 of silicon and having a sharp point for piercing the
3 skin of a subject, the method comprising:
4 providing a silicon substrate; and
5 plasma etching the silicon substrate into a sharp probe
6 for piercing the patient's skin.
- 1 13. The method of Claim 13 and further comprising etching
2 the silicon wafer into a microlancet device having a
3 diameter between approximately 50 micrometers and
4 approximately 250 micrometers.
- 1 14. The method of Claim 13 and further comprising etching
2 the silicon wafer into a microlancet device having a
3 length between approximately 1 millimeter and
4 approximately 3 millimeters.
- 1 15. The method of Claim 13 and further comprising applying
2 a sulfuric acid/hydrogen peroxide mixture in water to
3 the silicon wafer.
- 1 16. The method of Claim 13 and further comprising
2 depositing a nitride film on the silicon wafer.
- 1 17. The method of Claim 17 wherein the nitride film has a
2 thickness of approximately 2000 Angstroms.
- 3 18. The method of Claim 17 and further comprising applying
4 a coating of photoresist on the nitride film.

- 1 19. The method of Claim 17 and further comprising removing
2 a portion of the nitride film.
- 1 20. The method of Claim 20 and further comprising removing
2 a portion of the nitride film with potassium hydroxide
3 etchant.
- 1 21. The method of Claim 21 and further comprising applying
2 a photoresist coating to the silicon wafer.
- 1 22. The method of Claim 22 and further comprising
2 patterning the silicon wafer with a plasma etching
3 process.
- 1 23. The method of Claim 23 and further comprising removing
2 the photoresist coating.
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